

4. Mr. Montgomery brings up the possibility of "predatory signals" if a LEC is permitted to lower its prices. (p. 3) Mr. Montgomery seems unaware of the basic economics of telecommunications competition. Network construction requires the investment of a large proportion of sunk costs.¹ Fiber optic cables sunk underground, for instance, have an extremely low value in uses other than telecommunications. Thus, once a firm has entered a typical telecommunications market, the barriers to exit are quite large. Moreover, if a firm were to exit, the barriers to re-entry are low since the fiber optic network remains in the ground ready for use by the next competitor. Thus, predation is extremely unlikely in telecommunications.

5. Predation occurs when a firm prices below cost for a sufficient period to drive its rivals from the market and then increases its price to the monopoly level. Developments in economic analysis, regulation, and legal analysis all demonstrate that the potential problem of predation does not create an anti-competitive opportunity for a LEC. First, for predation to have an adverse competitive effect, the LEC would need to succeed in forcing other competitive local exchange providers or access providers to exit telecommunications markets. LECs could not hope to succeed because the marginal cost of local exchange or access is very low compared to the total cost of a network. Given the very low marginal costs compared to fixed costs, a LEC would have to keep the price extremely low and suffer huge financial losses while engaged in a predatory strategy.

6. Furthermore, such a predatory strategy could not succeed. The existing competitive networks that have already been constructed would remain in place since they are the essence of sunk costs. These sunk costs create a powerful barrier to exit because the assets cannot be used in other economic

¹ Sunk costs are costs which are not recovered if a firm subsequently decides to exit the industry. For their potential importance in entry and exit decisions see e.g. the 1992 US Department of Justice and Federal Trade Commission Horizontal Merger Guidelines, para. 3.0.

activities.² Thus, if a LEC did succeed in driving a new entrant from the local exchange or access markets and attempted to raise its prices to supra-competitive levels, there would be no barrier to re-entry. In these economic circumstances, predation cannot hope to succeed and is an economically irrational business strategy.³

7. Both the US Supreme Court and other US Courts have stated that predation rarely occurs, especially when barriers to exit exist:

"However, significant barriers to exit the market, as testified to by Professor Hausman, and the fact that the Government could not cite one modern example of successful predatory pricing, indicate that the Government's fear is unfounded. It is now accepted that "predatory pricing schemes are rarely tried, and even more rarely successful." (quoting a US Supreme Court Opinion, US v. Eastman Kodak Co., 853 F. Supp. 1454, 1478, (W.D.N.Y. 1994), affd, US v. Eastman Kodak Co., 63 F.3d 95 (2d Cir. 1995))

Given the barriers to exit created by sunk costs in access provision and provision of local exchange service, and the absence of barriers to re-entry, a LEC could not successfully predate. Indeed, neither AT&T nor the BOCs were ever found to have preyed against their rivals in the years preceding the AT&T divestiture.⁴

² The importance of barriers to exit in lessening the change of predation has been recognized by the US Courts. See e.g. US v. Eastman Kodak Co., 853 F. Supp. 1454, 1478, (W.D.N.Y. 1994), affd 63 F.3d 95 (2d Cir. 1995).

³ A recent analysis by Professors Paul Milgrom and John Roberts concluded that predatory pricing is even more unlikely than usual in telecommunications because of the high fixed costs, low marginal costs, and incumbents which use similar technology. (Affidavit of Paul Milgrom and D. John Roberts, U.S. v. Western Electric, BOC Memorandum, Appendix Vol. I, Tab 27, July 6, 1994)

⁴ Thus, Mr. Montgomery's reference to the pre-divestiture experience of AT&T, p. 12, fn. 20, is contradicted by the facts as well as the regulatory framework of rate of return used in the pre-divestiture period.

8. Yet another regulatory reason exists that makes successful predation extremely unlikely. The FCC's rules cap the rates for access. If a LEC attempted to predate by lowering its prices to force out its competitors, it could not subsequently raise them to monopoly levels if it succeeded in a predatory attempt. The FCC mandated price caps would not allow monopoly prices to be established. The price cap system would guarantee that the LEC would lose money in a predatory attempt. Thus, the costs of predation could not be recovered so that predation could only lose money and would be irrational to attempt.

9. Mr. Montgomery also attempts to make a "reputation for predation" argument that would deter new entry. This claim does not make economic sense in the telecommunications context because the action of keeping prices low reduces profits for the incumbent and is not credible behavior given the high proportion of sunk costs and the low marginal costs.⁵

10. Mr. Montgomery makes a mistake in elementary economics--he states an unregulated firm would only use price reduction to signal potential rivals not to enter. (p. 6) However, it is well recognized in textbooks that the fact of entry changes the fundamental dynamics of strategic reaction in the presence of sunk costs.⁶ Once the entrant has expended the sunk costs, it knows that the incumbent's best policy will be to charge competitive, not predatory, prices because the sunk costs create a barrier to exit. Thus, signalling will not work in a situation with high sunk costs and low marginal costs as exists in telecommunications markets.

⁵ This reputation for predation argument, in the context of telecommunications, was recently rejected by the US Court of Appeals for the District of Columbia Circuit. See US v. Western Electric, 993 F.2d 1572 (D.C. Cir 1993).

⁶ See e.g. Jean Tirole, The Theory of Industrial Organization, (Cambridge, MIT Press), pp. 314-317.

11. Note that the predatory action would have to be permanent because as soon as prices were raised to normal levels, entry would occur immediately. Thus, the incumbent would be forced to suffer a profit loss forever, earning below competitive returns for its shareowners. This action could not be maintained because shareowners would withdraw their investment because of the below normal returns. Second, predation is not a credible action that can forestall new investment because once a competitor makes the sunk investment, it is not in the incumbent's best economic interests to maintain below normal prices since the investment is sunk. Thus, Montgomery's speculative reputation argument assumes irrational economic behavior because it assumes an incumbent who will always respond to actual entry with below cost pricing, making it impossible for the entrant to realize any return on investment. Once the sunk investment of a new entrant has occurred, it is rational for the LEC to price competitively because the new entrant's investment is sunk, which creates barriers to exit. Thus, the high amount of sunk costs in telecommunications compared to the low marginal costs makes a "reputation for predation" strategy non-credible behavior.

12. Mr. Montgomery makes other claims that are contradicted by economic analysis:

(1) "For example, predatory strategies are more attractive if the firm believes that its overall costs of predation can be recouped from higher profits elsewhere." (p. 11) Economic analysis states that firms attempt to maximize their profits. No reason exists for a firm with profits elsewhere to be more likely to attempt predation or to attempt to raise its prices elsewhere to fund predation.⁷ No economic evidence (or legal evidence) demonstrates that multi-product firms are more likely to attempt predation than are single product firms. Capital markets work extremely well in the US for both a hypothetical predator and its hypothetical victim so that the

⁷ Indeed, if the firm increases its prices on another product to fund a predatory attempt, the firm is not maximizing its profits initially. Mr. Montgomery once again assumes irrational economic behavior.

existence of profits from other products typically does not affect economic behavior (predatory or otherwise). Thus, attempted predation always forces a near term reduction in profits, and it does not matter whether reduced profits are "made up" with higher profits elsewhere.

(ii) He claims that more price options increase the attraction of predatory strategies to some LECs. (pp. 13-14) No analysis is given to support this claim. Unregulated firms have wide latitude to offer different price options, but no economic analysis or actual experience finds that these unregulated firms are more likely to engage in attempted predation.

13. Mr. Montgomery asserts that the "ability to invidiously discriminate increases incentive for predatory pricing." (p. 5)⁸ Mr. Montgomery seems unaware of the conditions under which price differentiation is consumer welfare enhancing. An overall increase in market demand caused by price differentiation is a necessary condition for an increase in consumer welfare.⁹ Here, where access prices are well above cost, price differentiation is very likely to increase consumer welfare and is virtually certain to increase economic efficiency. Since overall market demand will increase under the price cap system and price differentiation (or the LEC action will be non-profit maximizing), economic efficiency must increase. If the LEC is currently at the price cap limit, at worst, consumer welfare changes would net out to zero. If the LEC reduces overall access prices below the cap, then consumer welfare must increase along with economic efficiency. Thus, reductions in prices will benefit both consumers and increase economic efficiency.

⁸ Mr. Montgomery refers to "studies of predatory pricing" and price discrimination (p. 13), but he gives no references to these purported studies. Since I am unaware of any successful predation in the past 40 years, I find this unsupported reference to be puzzling.

⁹ See e.g. Jean Tirole, The Theory of Industrial Organization, (Cambridge, MIT Press), pp. 137-138.

14. Mr. Montgomery claims without any support that "some of the resulting pricing actions [by LECs] likely will be predatory." (p. 15) If AT&T never successfully predated in pre-divestiture days (when rate of return regulation was used) and successful predation is "rarely attempted and even less rarely successful," then the claim that predation is likely to occur should be based on something--either economic analysis or a history of successful predation in related industries. Mr. Montgomery offers neither form of support, and he never evaluates the potential tradeoff in increased consumer welfare and economic efficiency that will result from lower LEC access prices.

15. Mr. Montgomery misses the point that competitive firms do not always know the "optimal" competitive level. As I stated in my initial statement, in California, cellular firms did not introduce substantial price reductions until they were permitted to increase prices back up to former levels if the price decreases were not successful. Similar pricing behavior occurs almost daily in airline markets. Firms decrease their prices by 50%, and later they raise their prices back to former levels as competitive conditions change with entry and exit by competitors. Price discrimination is a fact of daily life. Yet almost all economists have concluded that this type of competition helps consumers and no predation has been found.¹⁰ The FCC should allow LECs to adjust their prices since the adjustments will be downward which will benefit consumers and increase economic efficiency. An unsupported claim that predation could occur is overwhelmed by the welfare enhancing effect of lower prices.

¹⁰ A recent study is A.A. Morrison and C. Winston, The Evolution of the Airline Industry. (Washington: Brookings), 1995.

II. AT&T

16. Professor Douglas Bernheim has submitted a report on behalf of AT&T. Prof. Bernheim claims that competition is needed for all service components of a LEC before streamlined regulation should be permitted. (p. 1. pp. 19ff.) Prof. Bernheim is wrong. He fails to recognize that regulatory rules, e.g. imputation, can be used for components where competition has not developed while competitive market forces can be allowed to benefit consumers and increase economic efficiency.

17. This situation has long been recognized by economists, including AT&T's long time witness Professor William Baumol. Prof. Baumol (on behalf of AT&T) and I (on behalf of Pacific Bell) testified in a state regulatory proceeding in California that streamlined regulation was preferable even if some "monopoly building blocks" existed so long as correct regulatory rules were in place. The California Public Utilities Commission (CPUC) agreed: "Imputation is our effort to solve a problem that arises from the uneasy mixture of competition and monopoly that characterizes the current telecommunications industry" (CPUC Decision 94-09-065, p. 204) The CPUC adopted a rule that LECs were permitted to decrease their rates down to their marginal costs plus the contribution charged to competitors in monopoly building blocks.¹¹ Thus, economists and regulatory commissions have recognized that consumer benefit enhancing competition can occur from increased price flexibility, even when competition with respect to some components does not exist.¹²

¹¹ I discuss the economic reasoning behind this rule in J. Hausman, "Proliferation of Networks in Telecommunications", ed. D. Alexander and W. Sichel, Networks, Infrastructure, and the New Task for Regulation, (Ann Arbor, Univ. of Michigan Press), 1995.

¹² Prof. Bernheim does acknowledge an imputation rule, but his condition of equal profit margins (p. 22) is the incorrect rule for imputation. A regulated company can well earn different profit margins because of different cost and demand conditions for the final product or service. Thus, the correct imputation rule is that the same contribution for the monopoly building block be incorporated into the price of the final product or service. The CPUC decision discusses the economic logic of this rule at length. The

18. In terms of market definition, Prof. Bernheim recommends a lengthy determination about the "efficiency and competitiveness" of each resale market.¹³ Prof. Bernheim fails to note that arbitrage (e.g. bypass) is a powerful economic force that causes competition to spread from one market segment to another. The FCC would be much better advised to reduce regulatory rules (as Congress currently proposes), which create artificial regulatory barriers and allow competition to increase.

19. In his statement Prof. Bernheim creates hypothetical scenarios that have no basis in reality. His claims of the "leverage" of bottleneck monopoly power have been considered numerous times in MFJ proceedings, and they have been uniformly rejected by the US Court of Appeals for the District of Columbia Circuit. For instance, his first example assumes that a LEC can refuse to provide a bottleneck service. (p. 5) Even assuming such a bottleneck service existed, it is absurd to think that interconnection will not be required by regulators. Next, he states that if access is required then discrimination is a possibility. (p. 5) Of course, anti-discrimination rules have long existed. Prof. Bernheim never confronts actual market evidence which demonstrates these hypothetical outcomes have no basis in reality.

20. For instance, consider cellular telephone. Block A providers are dependent on LECs, who are typically also the Block B cellular providers, for local network interconnection and long distance access in certain situations. LECs have not been able to use control of the local network to disadvantage their cellular competitors through refusal of access or through discrimination. Thus, Prof. Bernheim's hypothetical "Implication #1 (pp. 4-5)

equal profit approach was rejected by the CPUC.

¹³ Prof. Bernheim did not recommend a similar investigation for AT&T despite uncontroverted evidence that AT&T was price discriminating against cellular customers in long distance.

is refuted by the antitrust laws, by FCC regulation, and by actual market outcomes.

21. Prof. Bernheim's geographic market definition discussion is also incorrect. He claims that if a CAP is not serving a given city block, it should be a separate geographic market (p. 7). Under Prof. Bernheim's reasoning, a given building would be a separate geographic market if a CAP had not yet served the building, even though the CAP served the adjacent building. Thus, a building by building determination would be necessary to define geographic markets using the Bernheim approach. Such an outcome results in economic nonsense. Suppose, I note in Boston that a LEC has reduced its price for access even though CAPs were not on each block. All of the downtown is a single geographic market because CAPs have a high supply elasticity to (almost) immediately expand their networks to serve new customers. Thus, the presence of a CAP in a given geographic region along with its ability to expand its network brings the entire area into the same geographic market whether or not the CAP literally serves each block or each building. Prices could well differ in this geographic market depending on the costs to serve particular customers, but prices will be competitive due to the demonstrated market evidence of customers finding the CAP services to be acceptable and the CAP's ability to expand its network.

22. Furthermore, Prof. Bernheim's entire discussion of price uniformity (pp. 9-11) is incorrect. Prof. Bernheim fails to remember that costs vary across customers, and that in a competitive market prices follow costs. Thus, under relaxed regulation, price uniformity might well end because customers who buy multiple DS-1 lines are less costly to serve than customers who buy a single DS-1 line. Regulation has often forced LECs to charge uniform prices despite significant differences in costs. Relaxed regulation will allow prices to reflect costs and lead to increased economic efficiency. Prof. Bernheim totally neglects the importance of costs in his discussion of price

uniformity.¹⁴

23. Prof. Bernheim's recommendation for more stringent competitive tests for LECs (pp. 12 ff.) again has no basis in actual market outcomes. He discusses possible discrimination in quality or price, but he fails to explain why these possible outcomes did not occur in cellular telephone. He brings up "economic incentives" (p. 13), but he fails to note the lack of ability of LECs to carry out strategies. Indeed, these strategies are identical to the possible strategies that opponents of BOC entry into information services brought up in the MFJ reviews.¹⁵ No evidence has arisen that the BOCs have impeded competition in information service markets--indeed the Internet is booming. Thus, the gap between hypothetical possibilities and actually market experience remains totally unexplained in Prof. Bernheim's report.

24. Prof. Bernheim brings up the possibility that facilities-based competition might be insufficient because of the possibility of a stable oligopoly.¹⁶ (p. 15) His recommendation is that a LEC be required to demonstrate "clear evidence of significant rivalry". (p. 16) This recommendation is ridiculous--the US economy has oligopoly outcomes in numerous industries and few economists recommend regulation as the preferred outcome. Economists have long recognized the costs of regulation especially in technologically dynamic industry such as telecommunications. Prof. Bernheim apparently prefers a regulatory solution to a market based solution, an approach favored by few other economists.

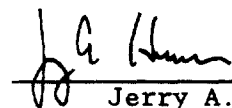
¹⁴ An empirical example makes this point easily. Most consumer food products are national geographic markets, e.g. candy bars. Yet the price of candy bars is often higher in a center city supermarket than elsewhere. The higher price reflects the higher cost of delivery and service in downtown areas.

¹⁵ The FCC supported BOC entry into information service markets.

¹⁶ Again AT&T did not put forward this claim in the dominance proceeding despite abundant evidence of a lack of competition among long distance providers who immediately followed every AT&T price increase for residential long distance service.

25. Prof. Bernheim adopts AT&T's suggestion that a 30% market share test is appropriate before additional pricing flexibility be granted to the LECs. He fails to use economic analysis to state why a market based share approach is correct, and why 3 competitors are needed. Indeed, he totally fails to ever state why pricing flexibility will not benefit consumers and increase economic efficiency. Prof. Bernheim fails to explain why AT&T's economic interests and consumers interests are the same. The fact is that they are not. AT&T does not want LEC competition while consumers would benefit from increased competition. Thus, what is good for AT&T is not necessarily good for consumers. Regulation and antitrust law exist to help consumers, not to help AT&T avoid competition.

26. Prof. Bernheim's final recommendation, divestiture of competitive services, fails to account for economies of scope in telecommunications services, an important economic factor recognized by economists and the FCC for many years. His proposal would increase prices to consumers and limit competition in many areas of telecommunications where consumers would receive important benefits, e.g. competition with cable providers. Indeed, overall Prof. Bernheim does not once, in his entire report, mention the increased consumer welfare from lower prices and increased economic efficiency resulting from moving prices closer to costs. He apparently favors the continuation of existing regulatory distortions that harm consumers and competition. Thus, he never considers the regulatory tradeoff of benefits from lower prices and new services against possible exercise of market power by a regulated LEC. This tradeoff remains the fundamental goal of regulation.

 9 Jan 1986
Jerry A. Hausman

CERTIFICATE OF SERVICE

I hereby certify that I have this 11th day of January, 1996 served all parties to this action with a copy of the foregoing REPLY COMMENTS by placing a true and correct copy of the same in the United States Mail, postage prepaid, addressed to the parties listed on the attached service list.


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